IN THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A multi-function hub for use in an assist system, comprising:

a physical interface;

a computational node disposed on the physical interface, the computational node comprising programmable logic for implementing program controlled functions; and

an input/output ("I/O") interface ~~for communication to~~ disposed on the physical interface, the I/O interface being adapted to communicate with the computational node and a plurality of other computational nodes, wherein the I/O interface communicates with the plurality of other computational nodes via a common data link.

2. (Original) The hub of claim 1 wherein the programmable logic implements input/output communication functions.

3. (Original) The hub of claim 1 wherein the programmable logic implements motion control algorithms.

4. (Original) The hub of claim 1 wherein the I/O interface provides communication to a plurality of sensors.

5. (Original) The hub of claim 1 wherein the I/O interface provides input from an intent sensor.

6. (Original) The hub of claim 1 wherein the I/O interface provides control outputs to actuators.

7. (Original) The hub of claim 1 further comprising an electrical interface to provide electrical power to a tooling.

8. (Currently Amended) The hub of claim 1 further comprising ~~an~~ a pneumatic interface to provide pneumatic power to a tooling.

9. (Currently Amended) The hub of claim 1 further comprising:
at least one user operable ~~controls~~ control accessible from the outside of the hub.

10. (Currently Amended) The hub of claim 1 further comprising:
~~an~~ a user interface connectable to ~~a~~ an external computer~~.~~ or a PDA.

11. (Original) The hub of claim 1 further comprising:
a network interface in communication with a local area network.

12. (Original) The hub of claim 1 further comprising:
a network interface in communication with an information network.

13. (Original) The hub of claim 1 further comprising:
a network interface in communication with an Internet.

14. (Original) The hub of claim 1 further comprising:
a load cell for determining the weight of a payload suspended from the multi-function hub.

15. (Original) The hub of claim 1 further comprising:
a strain gauge for determining the weight of a payload suspended from the multi-function hub.

16. (Original) The hub of claim 1 further comprising:
a flexure for determining the weight of a payload suspended from the multi-function hub.

17. (Currently Amended) The hub of claim 1 further comprising:
user programmable switches ~~on the outside of the hub~~.

18. (Original) The hub of claim 1 further comprising:
a user display.

19. (Original) The hub of claim 1 further comprising:
a personal digital assistant.

20. (Original) The hub of claim 1 wherein the physical interface comprises a swivel.

21. (Currently Amended) The hub of claim 1 further comprising an intent sensor ~~in communication with the hub~~ to indicate a user's intent to move the payload.

22. (Currently Amended) The hub of claim 21 wherein the intent sensor is mechanically fastened to the ~~hub~~ physical interface.

23. (Original) The hub of claim 21 wherein the intent sensor comprises an inline handle.

24. (Original) The hub of claim 23 wherein the inline handle comprises a grip.

25. (Original) The hub of claim 23 wherein the inline sensor descends from the hub.

26. (Original) The hub of claim 21 wherein the intent sensor comprises a slidable collar.

27. (Original) The hub of claim 21 wherein the intent sensor comprises a spring return.

28. (Original) The hub of claim 21 wherein the intent sensor comprises a hall-effect proportional control.

29. (Original) The hub of claim 21 wherein the intent sensor comprises user operable controls.

30. (Currently Amended) The hub of claim ~~21~~ 29 wherein the user operable controls are programmable.

31. (Original) The hub of claim 21 wherein the intent sensor comprises a threaded mechanical connection.

32. (Currently Amended) The hub of claim 1, wherein the I/O interface uses a digital communication protocol to communicate with the plurality of other computational nodes via the common data link.

33. (Previously Presented) The hub of claim 32, wherein the digital communication protocol is the Controller Area Network (CAN) protocol.

34. (Previously Presented) The hub of claim 32, wherein the digital communication protocol is a local area network protocol.

35. (Previously Presented) The hub of claim 32, wherein the digital communication protocol is an Ethernet protocol.

36. (Previously Presented) The hub of claim 1, wherein the common data link is a bus.

37. (Previously Presented) The hub of claim 1, wherein the common data link is a wireless data link.

38. (Currently Amended) The hub of claim 1, wherein the I/O interface uses packet-based communications to communicate with the plurality of ~~communication~~ other computational nodes via the common data link.

39. (Previously Presented) The hub of claim 1, wherein the physical interface provides mechanical support within the assist system.